Alternative F
Extensive Habitat Restoration with Storage

General

The primary objective of this alternative will be to develop extensive amounts of habitat restoration in the Delta. New storage will be developed in the Delta in this alternative which will be used primarily for environmental purposes. The existing system of Delta conveyance and export will be relied upon to provide export demands for the CVP and SWP. To the extent possible Delta exports will be shifted away from periods that are sensitive for fish species.

Demand management, including urban and agricultural water conservation, water reclamation, and land retirement, will provide additional supplies for existing water users and for the environment. This alternative will also establish a long-term drought water bank to improve water supply reliability in dry years.

Operation of Delta Diversions

Diversions from the Delta will be reliant on the existing export facilities. Operations of these facilities will be only slightly altered to try to shift some of the export to periods which have less impact on fish species. The restoration of extensive amounts of habitat will create abundant fish populations to offset take and other impacts associated with Delta export operations which current can significantly reduce export capacity. Diversions to a new in-Delta island storage facility will be made during periods which offer the least impact to Delta aquatic species.

- Delta exports will operate much as they have in past. However, the reliability of exports and likelihood of exports be curtained of ceased due to concerns for anadromous or resident fish species will be significantly reduced.

- Delta export diversions will continue to be guide by the current Bay-Delta Salinity Control Plan, recognizing limits on exports due to established export ratios.

- Delta exports made for storage in San Luis Reservoir and other downstream reservoirs will be made as much as possible in the late fall to mid winter period, to reduce impacts anadromous fish species. Diversions during this period will be made to skim the falling limb of high flood flow hydrographs, providing high quality water for storage and export further south.

- Water will be diverted into in-Delta storage during November through January to minimize impacts to Delta aquatic species. There will be multiple diversion intakes into this Delta island storage facility to further minimize impacts to fish.

Operation of New and Existing Storage

New storage in this alternative is limited to in-Delta island storage of about 300,000 to 400,000 AF. Existing storage upstream of the Delta will be operated in much the same manner as has been done in the past. The utilization of groundwater storage in the Sacramento and San Joaquin Valleys and the Tulare Lake Basin will be increased.

- Water stored in the new in-Delta island storage facility will be released from March through July, as needed, to: 1) improve fish transport through the Delta, particularly during periods of south Delta exports; 2) improve management of the X2 standard; 3) improve water quality in the south Delta; and 4) to provide water for export at the south Delta pumping facilities.

- Water in excess of carry-over needs in Sacramento Valley project reservoirs at the end of the operational year, typically September, will be transferred groundwater conjunctive use areas in the Sacramento and San Joaquin Valleys. Transferring this excess water would increase flood control storage space and help to regulate and reduce the occurrence of spills at project reservoirs. Groundwater storage, through conjunctive use operations, will form the basis of a long-term drought water bank program.

- During above average flow years, or when south of Delta storage is full, water from diversions will be used to recharge groundwater basins in conjunctive use and banking areas in the southern San Joaquin Valley and Tulare Lake Basin. Water stored in these basins will be utilized primarily during below average years to reduce the amount of exports from the Delta. A reduction in export will free-up water for environmental flows during these periods of naturally reduced flows.

Operation of Water Developed Through Conservation

Water developed through urban best management practices (BMP's) and agricultural efficient water management practices (EWMP's) will be used for a combination of water supply and environmental benefits, depending on the basin in which the water is developed.

- Water developed through implementation of agricultural EWMP's in the San Joaquin Valley will be used primarily to provide additional flows on the San Joaquin River and in the south Delta to improve water quality and the environment.

- Retirement of marginally-productive agricultural lands that contribute substantially to in stream water quality problems in the San Joaquin River will free up water that can be held in storage, released, or transferred to improve water quality and fish transport.

- Water developed through implementation of agricultural EWMP'S in the Sacramento Valley will be used primarily to augment water supply availability.

- Water conserved through urban wastewater reclamation (100,000 to 200,000 acre-feet) will be used to offset urban demands within the regions where the water was reclaimed. Reclaimed water could be used as grey water for landscape irrigation purposes, recharging groundwater which could be used for below average flow periods, for agricultural uses, or for potable or non-potable urban use.

Operation of Water for Fish and Wildlife Uses

Water developed for fish and wildlife purposes will be in the most efficient manner possible to enhance fish and wildlife habitats in the Sacramento and San Joaquin Valley and the Bay-Delta estuary.

- About 100,000 acre-feet of water will be purchased from willing sellers in the San Joaquin Valley. This water will used to aid in the transport fish through the Delta, particularly during periods of south Delta export operations, and to improve water quality in the south Delta during periods of low Delta inflows from the San Joaquin River.